

**REMARKS/ARGUMENTS**

Claims 10-17, and 21-25 are pending. Claim 10 is amended. No claims are added or deleted. No new matter has been introduced by this amendment.

***Claim Rejection under 35 U.S.C. §112***

Claim 10 stands rejected under 35 U.S.C. § 112 2nd paragraph. The Examiner stated that it is not clear as to why a second output data word or a shifted data word is being selected, and it is not clear from the claim as to where the shifted data word is generated from. In order to clarify the above questions and overcome the rejection, claim 10 has been amended by replacing all of the occurrences of the term “the shifted data word” with “the concatenated data word”. As to why one of the data words is being selected, page 4, lines 8-18 (reproduced below for the Examiner’s convenience) of the originally filed application describes the reasons for this question in detail:

In an exemplary embodiment adapted to the 64b/66b scheme of 10 Gb Ethernet, the present invention provides a mechanism for acquiring frame synchronization substantially faster than known approaches. Unlike known algorithms which tend to stay on the odd or on the even possibilities until all possibilities are exhausted, the present invention **alternates** between the **odd** as well as **even** possibilities, increasing the likelihood of a faster acquisition of synchronization. The mechanism of the present invention tests various sync header positions by alternating between **even** and **odd** candidate alignments without being biased to first search all odd (even) candidates before searching all even (odd) candidates. This effectively consolidates the 66 possible states to 33, thereby reducing implementation complexity.

In the particular embodiment described above, **odd** and **even** refer to the concatenated (previously “shifted”) data word and the second output data word respectively.

As to where the concatenated data word is generated from, claim 10 itself recites that the concatenated data word is a concatenation of a portion of the first output data word and a portion of the second output data word. Further details of this is described at page 8, line16 – page 9, line 7 of the originally filed application. The rejection of claim 10 under 36 U.S.C. § 112 2nd paragraph should be overcome by this amendment.

***Claim Rejection under 35 U.S.C. §103***

Claims 10, 13-17, 23 and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Taborek, Sr. et al., U.S. Patent 7,020,729, (hereinafter Taborek), Grivna U.S. Patent 6,539,051, (hereinafter Grivna), Wright et al., U.S. Patent 7,103,049, (hereinafter Wright), in view of Kaufmann U.S. Patent 5,483,539, (hereinafter Kaufmann). Claims 11-12 stand rejected under Taborek, Grivna, Wright, Kaufmann, in view of Swoboda et al., U.S. Patent 6,085,336, (hereinafter Swoboda). Claim 21 stands rejected under Taborek, Grivna, Wright, Kaufmann, in view of Fairchild et al., U.S. Patent 5,508,985, (hereinafter Fairchild). Claim 22 stands rejected under Taborek, Grivna, Wright, Kaufmann, in view of Washington et al., U.S. Patent 5,920,572, (hereinafter Washington). Claim 24 stands rejected under Taborek, Grivna, Wright, Kaufmann, in view of Stephenson, Jr. et al., U.S. Patent 5,081,654, (hereinafter Stephenson).

Applicant submits that Taborek, Grivna, Wright, or Kaufmann either individually or in any combination does not teach or suggest “wherein said state machine is coupled to the third port of the selector and selectively provides the second output data word or the shifted data word to the guesser and the rotator” as previously recited in claim 10.

In rejecting claim 10, the Examiner alledged that Grivna teaches “wherein said state machine is coupled to the third port of the selector and selectively provides the second output data word or the shifted data word to the guesser and the rotator (column 11, line 26 – column 12, line 10)”. Reading through column 11, line 26 – column 12, line 10 of Grivna, as best understood, it appears that the Examiner has correlated circuit 550 with the claimed state machine and barrel shifter 570 with the claimed selector. FIGURE 5 (reproduced below) of Grivna shows both the circuit 550 and the barrel shifter 570:

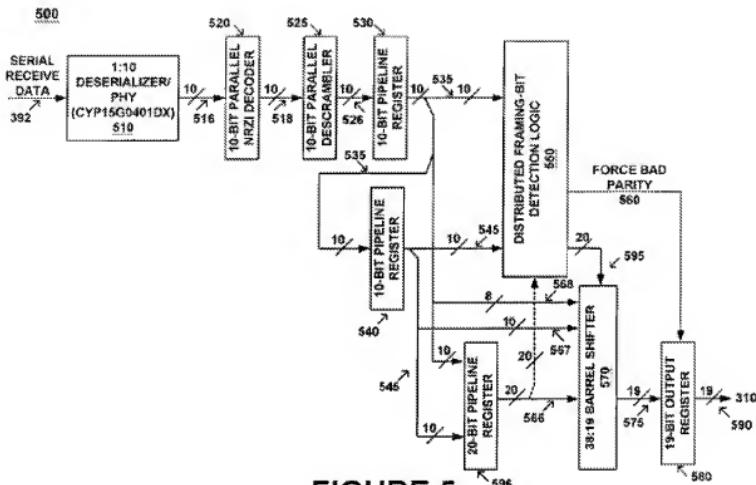


FIGURE 5

However, as clearly depicted above, output 575 of the barrel shifter 570 is only coupled to a register 580 and not to a guesser or to a rotator. Thus, the circuit 550 (purportedly corresponding to the claimed state machine) coupled to the barrel shifter 570 (purportedly corresponding to the claimed selector) cannot provide any data word to a guesser and a rotator. Accordingly, Applicant respectfully submits that Grivina does not teach or suggest "wherein said state machine is coupled to the third port of the selector and selectively provides the second output data word or the shifted data word to the guesser and the rotator" as previously recited in claim 10. The other references cited by the Examiner in rejecting claim 10, namely Taborek, Wright, Kaufmann taken even in combination also fail to teach this aspect of the claimed elements.

Nevertheless, in an effort to expedite prosecution and further distinguish claim 10 from cited references, claim 10 has been amended to recite in part "wherein said state machine is coupled to the third port of the selector and **alternately** provides the second output data word or the **concatenated** data word to the guesser and the rotator". As best understood, none of the

references cited by the Examiner to reject any of the claims in the instant application teach or even suggest the claimed state machine coupled to the third port of the selector and **alternately** provides the second output data word or the concatenated data word to the guesser and the rotator. Support for this amendment can be found throughout the originally filed specification, figures, and claims. For example, support can be found in page 4, lines 8-20, page 13, line 19 – page 14, line 2, and FIG. 3 of the originally filed application.

Applicant submits none of the references cited by the Examiner in the latest office action whether taken alone or in combination teach or suggest the elements of claims 10 as amended. Claim 10 and its dependent claims 11-17, and 21-25 are thus allowable.

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Respectfully submitted,

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